

Replacement claim 2

C2 1 2. The invention as defined in claim 1 wherein other terminal of said active
2 inductor is said first power supply terminal.

Unchanged claim 3

1 3. The invention as defined in claim 1 wherein said MOS transistor also has a
2 bulk terminal, said bulk terminal being connected to a second power supply terminal.

Unchanged claim 4

1 4. The invention as defined in claim 1 wherein MOS transistor is a negative metal
2 oxide semiconductor (NMOS) transistor.

Unchanged claim 5

1 5. The invention as defined in claim 1 wherein MOS transistor is a positive metal
2 oxide semiconductor (PMOS) transistor.

Unchanged claim 6

1 6. The invention as defined in claim 1 wherein said MOS transistor also has a
2 bulk terminal, said bulk terminal being connected to a second power supply terminal, and
3 wherein said power supply voltage supplied from said first power supply terminal is
4 higher than a voltage supplied from said second power supply terminal.

Unchanged claim 7

1 7. The invention as defined in claim 1 wherein said MOS transistor also has a
2 bulk terminal, said bulk terminal being connected to a second power supply terminal, and
3 wherein said power supply voltage supplied from said first power supply terminal is
4 lower than a voltage supplied from said second power supply terminal.

Unchanged claim 8

1 8. The invention as defined in claim 1 wherein said MOS transistor is a negative
2 metal oxide semiconductor (NMOS) transistor, said NMOS transistor also has a bulk
3 terminal, said bulk terminal being connected to a second power supply terminal, and
4 wherein said first power supply terminal is the positive power supply terminal for said
5 integrated circuit and said second power supply terminal is the negative power supply
6 terminal for said integrated circuit.

Unchanged claim 9

1 9. The invention as defined in claim 1 wherein said MOS transistor is a positive
2 metal oxide semiconductor (PMOS) transistor, said PMOS transistor also has a bulk
3 terminal, said bulk terminal being connected to a second power supply terminal, and
4 wherein said first power supply terminal is the negative power supply terminal for said
5 integrated circuit and said second power supply terminal is the positive power supply
6 terminal for said integrated circuit.

Unchanged claim 10

1 10. The invention as defined in claim 1 wherein said voltage that is derived from
2 said power supply voltage and has a larger absolute value than said power supply voltage
3 supplied by said first power supply terminal and the same sign as said power supply
4 voltage has a larger absolute value than said power supply by one threshold voltage of
5 said MOS transistor.

Unchanged claim 11

1 11. The invention as defined in claim 1 wherein said voltage that is derived from
2 said power supply voltage is generated from said power supply voltage by a high voltage
3 generator.

Unchanged claim 12

1 12. The invention as defined in claim 1 further including on said integrated
2 circuit a high voltage generator that generates said voltage that has a larger absolute value
3 than said power supply voltage supplied by said first power supply terminal and the same
4 sign as said power supply voltage.

Unchanged claim 13

1 13. The invention as defined in claim 1 further including on said integrated
2 circuit a high voltage generator that generates said voltage that has a larger absolute value
3 than said power supply voltage supplied by said first power supply terminal and the same
4 sign as said power supply voltage, said high voltage generator comprising:

5 an oscillator generating an oscillating output signal;

6 a voltage doubler receiving as an input said oscillating output signal from said
7 oscillator and supplying as an output a signal that has an average larger absolute value
8 than said power supply voltage supplied by said first power supply terminal and the same
9 sign as said power supply voltage;

10 a clamp which receives as an input said output of said voltage doubler and
11 supplies an output voltage substantially clamped to a prescribed value that has a larger
12 absolute value than said power supply voltage supplied by said first power supply
13 terminal and the same sign as said power supply voltage;

14 and a ripple filter which filters said output of said clamp and supplies the output
15 of said high voltage generator, which said voltage that has a larger absolute value than
16 said power supply voltage supplied by said first power supply terminal and the same sign
17 as said power supply voltage.

Replacement claim 14

1 14. (Amended) A circuit for use as an active inductor on an integrated circuit,
2 comprising:

3 a metal oxide semiconductor (MOS) transistor; and

4 a beyond voltage generator which generates a beyond voltage that is either greater
5 than the highest voltage or less than the lowest voltage being supplied to said integrated
6 circuit by a power supply;

7 wherein said MOS transistor is coupled to said beyond voltage generator so as to
8 bias said MOS transistor with said beyond voltage and said MOS transistor is adapted to
9 operate as said active inductor.

Replacement claim 15

1 15. (Amended) The invention as defined in claim 14 wherein said beyond
2 voltage generator comprises:

3 an oscillator generating an oscillating output signal;

4 a voltage doubler receiving as an input said oscillating output signal from said
5 oscillator and supplying as an output a voltage signal that has an average voltage that is
6 either greater than the highest voltage or less than the lowest voltage being supplied to
7 said integrated circuit by a power supply;

8 a clamp which receives as an input said output of said voltage doubler and
9 supplies an output voltage substantially clamped to a prescribed value that is greater than
10 the highest voltage or less than the lowest voltage being supplied to said integrated circuit
11 by a power supply;

12 and a ripple filter which filters said output of said clamp and supplies the output
13 of said beyond voltage generator.

Replacement claim 16

1 16. (Amended) An integrated circuit comprising a metal oxide semiconductor
2 (MOS) transistor adapted to operate as an active inductor that is biased using a voltage
3 generated on said integrated circuit that is outside the range of the voltage supplied by a
4 power supply off of said integrated circuit for operating said integrated circuit.

Unchanged claim 17

1 17. The invention as defined in claim 16 wherein said MOS transistor is a
2 negative metal oxide semiconductor (NMOS) transistor.

Unchanged claim 18

1 18. The invention as defined in claim 16 wherein said MOS transistor is a positive
2 metal oxide semiconductor (PMOS) transistor.

Unchanged claim 19

1 19. The invention as defined in claim 16 wherein said active inductor is biased by
2 coupling a gate of said MOS transistor to said voltage generated on said integrated circuit
3 that is beyond the range of the voltage supplied by a power supply for operating said
4 integrated circuit via an impedance.